

Physics 1214 - General Physics II

Quiz #22 - 2013.04.05

Solutions

1. If light is sent through a single slit of width a , and then the width of the slit is halved, and the experiment is redone, which will have a wider diffraction experiment: a slit of width a , or of width $a/2$?

The narrower the slit, the wider the diffraction pattern, so with a width of $a/2$, there will be a wider diffraction pattern.

2. State Huygens Principle.

Every point of a wave front may be considered the source of secondary wavelets that spread out in all directions with a speed equal to the speed of propagation of the wave.